IN THE CLAIMS:

1. (Original) A method of forming a semiconductor device feature, the method comprising:

providing a substrate having a first layer formed thereon;

covering said substrate with a second layer of material;

implanting ions into said second layer of material to modify a structure of the material of said second layer;

patterning said second layer of material and said first layer by photolithography to form said semiconductor device feature in said first layer; and

removing said patterned second layer of material, whereby a selectivity in removing said patterned second layer is increased by the implanting of said ions.

2. (Original) The method of claim 1, wherein said ions are substantially inert ions.

3. (Original) The method of claim 1, wherein said ions are at least one of argon ions, xenon ions, germanium ions and silicon ions.

4. (Original) The method of claim 1, wherein the ion dose is in the range of approximately 1×10^{13} to 5×10^{15} ions/cm^2.

5. (Original) The method of claim 1, wherein the ion energy is in the range of approximately 5-80 keV.

6. (Original) The method of claim 1, wherein said layer of material is an anti-reflective coating layer.

7. (Original) The method of claim 1, wherein said layer of material is comprised of an inorganic material.

8. (Original) The method of claim 1, wherein the material of said layer of material is one of silicon nitride and silicon reacted nitride.

9. (Original) The method of claim 1, wherein a dimension of the device feature in one direction is 100 nm or less.

10.-21. (Canceled)

22. (New) A method, comprising:

providing a substrate having a first layer of material formed thereabove;

depositing a second layer of material above said first layer of material; and

implanting ions into said second layer of material to modify a structure of the material of said second layer of material and thereby increase an etch selectivity of said second layer of material relative to said first layer of material.

23. (New) The method of claim 22, wherein said first layer of material comprises a gate electrode material.

24. (New) The method of claim 22, wherein said second layer of material comprises an anti-reflective coating material.

25. (New) The method of claim 22, wherein said first layer of material comprises a gate electrode material and said second layer of material comprises an anti-reflective coating material.

26. (New) The method of claim 22, wherein said ions comprise at least one of argon ions, xenon ions, germanium ions and silicon ions.

27. (New) The method of claim 22, wherein said ions are substantially inert ions.

28. (New) The method of claim 22, wherein an implant energy of an ion implant process performed to implant said ions is selected such that the structure of the material comprising the second layer of material is modified substantially throughout an entire thickness of said second layer of material.

29. (New) The method of claim 22, wherein an implant energy of an ion implant process performed to implant said ions is selected such that said implanted ions are substantially located adjacent an interface between said first layer of material and said second layer of material.

30. (New) The method of claim 22, further comprising performing at least one etch process to define a feature in said first layer of material.

31. (New) The method of claim 30, further comprising performing an etching process to remove a portion of said second layer of material above said feature in said first layer of material.

32. (New) A method, comprising:

providing a substrate having a first layer of gate electrode material formed thereabove;

depositing a second layer of material comprising an anti-reflective coating material above said first layer of gate electrode material; and

performing an ion implant process to implant ions into said second layer of material to modify a structure of the material of said second layer of material and thereby increase an etch selectivity of said second layer of material relative to said first layer of gate electrode material, wherein an implant energy of said ion implant process is selected such that the structure of the material comprising the second layer of material is modified substantially throughout an entire thickness of said second layer of material.

33. (New) The method of claim 32, wherein said ions comprise at least one of argon ions, xenon ions, germanium ions and silicon ions.

33. (New) The method of claim 32, wherein said ions are substantially inert ions.

35. (New) The method of claim 32, further comprising performing at least one etch process to define a feature in said first layer of material.

36. (New) The method of claim 35, further comprising performing an etching process to remove a portion of said second layer of material above said feature in said first layer of material.

37. (New) A method, comprising:

providing a substrate having a first layer of gate electrode material formed thereabove;

depositing a second layer of material comprising an anti-reflective coating material above said first layer of gate electrode material; and

performing an ion implant process to implant ions into said second layer of material to modify a structure of the material of said second layer of material and thereby increase an etch selectivity of said second layer of material relative to said first layer of gate electrode material, wherein an implant energy of an ion implant process performed to implant said ions is selected such that said implanted ions are substantially located adjacent an interface between said first layer of material and said second layer of material.

38. (New) The method of claim 37, wherein said ions comprise at least one of argon ions, xenon ions, germanium ions and silicon ions.

39. (New) The method of claim 37, wherein said ions are substantially inert ions.

40. (New) The method of claim 37, further comprising performing at least one etch process to define a feature in said first layer of material.

41. (New) The method of claim 40, further comprising performing an etching process to remove a portion of said second layer of material above said feature in said first layer of material.